

REMARKS

Claims 1- 20 are pending in the application. Claims 7-12 have been withdrawn from consideration. Claims 1 and 13 are independent claims. Claims 1 and 3 have been amended to replace intended use language with operational language. No new matter has been added by the amendments.

Claims 1-6 and 13-20 stand rejected in the referenced office action. Reconsideration of the application is respectfully requested in view of the remarks below. The Examiner's rejections are addressed in substantially the same order as in the referenced office action.

REJECTION UNDER 35 USC § 103

Claims 1, 4-6, 13-17 and 20 stand rejected under 35 USC § 103(a) as being unpatentable over *Gorham* (US 20020005866) in view of *Chui* (US 5841473). Claims 1 and 13 are independent claims.

One embodiment of the present invention is directed to an article of manufacture having a plurality of computer readable files relating to geophysical seismic data recorded thereon. The article comprises a medium having the computer readable files recorded thereon. The files include data for a map display for a geographical area. The

map display has multiple levels of geographic detail and includes a plurality of surface seismic data lines. The files further include data for a plurality of compressed seismic data files corresponding respectively to the surface seismic data lines. Each of the compressed seismic data files is used to produce a corresponding geophysical display when its corresponding surface seismic data line is selected. The files also include a plurality of references to a plurality of full seismic data files. The references correspond respectively to the plurality of compressed seismic data files. Each of the compressed seismic data files has less information content than its corresponding full seismic data file.

Applicant fails to appreciate the relevance of the *Gorham* reference to the claimed invention. In the referenced office action, the Examiner has cited MPEP § 2106 for the proposition that the type of stored data such as “seismic data” is considered to be non-functional descriptive material to be given little patentable weight. Applicant has reviewed the relevant portion of the MPEP. The MPEP states

“Nonfunctional descriptive material cannot render nonobvious an invention that would have otherwise been obvious. *In re Ngai*, **>367 F.3d 1336, 1339, 70 USPQ2d 1862, 1864 (Fed. Cir. 2004)”

Applicant respectfully submits that reliance on *In re Ngai* is inappropriate as the case is a nonprecedential opinion of the Federal Circuit.

The other case cited in the same section of the MPEP (*In re Gulack*) has been further explained by a later case of the Federal Circuit.

As an initial matter, this court notes that Gulack cautioned against a liberal use of "printed matter rejections" under section 103:

A "printed matter rejection" under § 103 stands on questionable legal and logical footing. Standing alone, the description of an element of the invention as printed matter tells nothing about the differences between the invention and the prior art or about whether that invention was suggested by the prior art. . . . [The Court of Customs and Patent Appeals], notably weary of reiterating this point, clearly stated that printed matter may well constitute structural limitations upon which patentability can be predicated. *Gulack*, 703 F.2d at 1385 n.8.

Despite this cautioning, the Board erroneously extended a printed matter rejection under sections 102 and 103 to a new field in this case, which involves information stored in a memory. This case, moreover, is distinguishable from the printed matter cases. The printed matter cases "dealt with claims defining as the invention certain novel arrangements of printed lines or characters, useful and intelligible only to the human mind." *In re Bernhart*, 417 F.2d 1395, 1399, 163 USPQ 611, 615 (CCPA 1969). The printed matter cases have no factual relevance where "the invention as defined by the claims requires that the information be processed not by the mind but by a machine, the computer." *Id.* (emphasis in original). Lowry's data structures, which according to Lowry greatly facilitate data management by data processing systems, are processed by a machine. Indeed, they are not accessible other than through sophisticated software systems. The printed matter cases have no factual relevance here. *In Re Lowry*, 32 F. 3d 1579 at 1583, (Federal Circuit 1994), Rehearing en banc denied.

Applicant notes that the data structure of the present invention is processed by a machine and, like *Lowry*, is not accessible other than through sophisticated software systems.

In addition, claim 1 further provides a structural relation in that it specifies that each of the compressed data files has *less* information content than the corresponding one of the full seismic data files.

Accordingly, applicant respectfully submits that:

- (1) the limitations of the type of data are just that, i.e., limitations, and
- (2) *Gorham* does not teach or suggest anything to do with seismic data and hence cannot be used for the purpose that the Examiner is attempting to do.

In order to sustain a rejection under 35 USC §103, the prior art of record must, when combined, teach all the limitations of the claimed invention. This condition is clearly not satisfied in the present case. Accordingly, applicant respectfully submits that claim 1 and claims 2- 6 that depend upon claim 1 are patentable under 35 USC § 103 over *Gorham* in view of *Chui*.

Claim 13 includes the substantive limitations of claim 1 discussed above. Accordingly, claim 13 and claims 14-20 that depend upon claim 13 are patentable under 35 USC § 103 over *Gorham* in view of *Chui* for the same reasons that claim 1 is


patentable under 35 USC § 103 over *Gorham* in view of *Chui*. Applicant further notes that claim 13 also includes a structural element in the conversion of seismic data from a vector format to a computer graphic format.

Claims 2, 3, 18 and 19 stand rejected under 35 USC §103 over *Gorham* in view of *Chui* and further in view of screenshots of ESRI. The patentability of these claims has been addressed above in the discussion of the patentability of claims 1 and 13.

No fee is believed to be due for the response. Please note the accompanying documents relating to a new power of attorney and a new correspondence address. The Commissioner is authorized to charge any deficiency and credit any surplus for the amendments herein to **Deposit Account No. 13-0010 (CON-1032)**.

Respectfully submitted,

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